ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.
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November 10, 1982

Ms. Becky Comstock, Esq.
Dorsey & Whitney
2200 First Bank Place East
Minneapolis, MN 55402

Dear Becky:

This letter specifies our requests to the USGS St. Paul office for data and information regarding the hydrogeology of the St. Louis Park area. We recognize that the USGS has been involved in studies that directly address the St. Louis Park ground water contamination, as well as studies related to heat storage in the Franconia Formation and regional characterization of the hydrologic system. The USGS data will be incorporated in our ground water modeling efforts and will also be useful in determining appropriate remedial actions for the site-swamp area.

Specific Requests

1.) How many monitoring wells, piezometers, and/or soil borings, other than those listed in Table 1 in Hult, and Schoenburg, 1981, Preliminary Evaluation of Ground Water Contamination by Coal Tar Derivatives, St. Louis Park Area, Minnesota have been placed by or for the USGS within the city limits of St. Louis Park?

2.) Are geologic, geophysical, sampling, installation, and/or driller's logs for any of the above mentioned holes available, and if so may we get copies?

3.) Were any soil samples collected from any of the above mentioned holes for subsequent chemical analysis for PAH, exctractables, or other organic constituents and if so, may be we get descriptions of the samples and copies of the analytical results?

4.) Were any water samples collected from any of the monitoring wells, piezometers, or private wells in St. Louis Park - including those installations listed in Table 1 of the 1981 USGS report as well as any installations identified in item 1 above - for subsequent chemical analysis for PAH, phenolics, TOC, or other organic or inorganic constituents other than those results given in the 1981 USGS report and those reported in the June 10, 1981 memorandum from the Chief, Central Laboratory, WRD, Denver, Colorado to the attention of Marc Hult, WRD, St. Paul, Minnesota for six water samples from SLP #4, SLP #15, W-117, Flame Ind., W-13 and P-14?

If so, may we get copies of the results?

5.) Have any water level measurements been made in any of the monitoring wells and/or piezometers in St. Louis Park which represent static levels, or at least water levels in response to the normal hydrologic flow regime in St. Louis Park, and if so may we get copies of these measurements or a summary of these data if convenient, other than those data given in the 1981 USGS report?

6.) Have any water level measurements been made in any of the monitoring wells and/or piezometers in St. Louis Park in conjunction with pumping or aquifer tests designed to show the effects of pumping a well at a known discharge rate on water levels in the pumping well and nearby observation wells over time, and if so may we get copies of the results of such tests including time pumping started, discharge rate or rates, water level measurements before, during and after pumping, the time the water level measurements were made, and which wells were involved? If any summaries of these data are available, such as drawdown - recovery curves, they would be appreciated.

7.) Is an accurate map available which locates and gives the measuring point and/or ground surface elevation of all monitoring wells, piezometers, and/or soil borings in St. Louis Park, and if so may we have 2 copies of the map?

In lieu of such a map, may we have a tabulation of latitude, longitude and measuring point and/or ground surface elevation for all monitoring wells, piezometers, and/or soil borings in St. Louis Park, other than those listed in Table 1 of the 1981 USGS report?

8.) From a conversation I had with Marc Hult on 10/19/82 I learned that Bob Miller of the USGS St. Paul office has data on vertical and horizontal transmissivities in the Franconia formation as a result of the heat storage project mentioned in the introduction to this letter. What are these values and how were they determined (aquifer testing or laboratory testing)? What is the thickness of the Franconia Fm. where the transmissivity values were determined and what is (are) the location(s) (latitude and longitude) of the test hole(s) drilled for the heat storage project?

9.) In the course of studying the Franconia Fm. for heat storage, what other hydrologic parameters were measured for any of the strata encountered in the test hole? May we have a tabulation of the values of these other parameters for each of the strata in which they were measured, or in lieu of a tabulation may we see the pumping test or other data used to calculate the various hydrologic parameters?

10.) In the course of USGS's other work, such as any modeling exercises, water resource studies, and/or basic investigations, have any data been generated regarding bedrock hydrologic characteristics in the structural feature known as the Twin Cities Basin? Specific characteristics of interest are thickness, areal distribution, storativity, vertical and/or horizontal transmissivity, porosity, and hydraulic conductivity. If these characteristics or some subset of these

have been determined at locations (or a location) in the Twin Cities Basin, may we have a tabulation of the information, or, if a tabulation is not available, may we have copies of the pertinent data needed to calculate the various hydrologic characteristics, except those listed in Table 8 and Table 9 in Norvitch, et. al. 1974, Water Resources Outlook for the Minneapolis-St. Paul Metropolitan Area, Minnesota? Specific reference to summary data contained in USGS Open File, Professional Paper, Water Resources or other reports which addresses these items would be an acceptable response to this request.

We would be happy to assist the USGS in addressing these request by discussing and explaining them further or by assisting in document collection and transfer. Let me know if you have any questions concerning our requests.

Sincerely,

William M. Gregg

William M. Gregg

WMG:JLH

cc: J. C. Craun (ERT)
W. R. Roder (RT&CC)